

# ANX

## AlphaNumeric Master Control Panel

### Operator's Manual



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## GENERAL INFORMATION

### Packing

If this equipment is to be reshipped, it should be packaged in the original manner. Please retain the original carton and packing material for this purpose.

### Packing List

- 1) ANX Control Panel
- 2) Wall Transformer, 9VDC, 900mA
- 3) Mounting Hardware Kit
- 4) Operator Manual
- 5) ANX-APP diskette or CD-ROM

### System Requirements

The ANX Alphanumeric Master Control Panel is designed to operate a Sigma Electronics ADX or MRX Series router. The ANX Control panel requires the database information to be downloaded into the routing switcher for Alphanumeric operation. The routing switcher requirements are as follows;

- 1) SCI-ADX with Version 4.1H firmware or later. (location IC U4 on SCI)  
or SCI-MRX with Version 4.1H firmware or later. (location IC U10 on SCI)

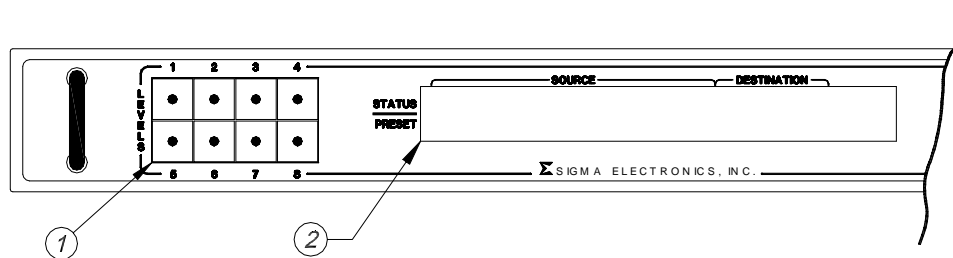
- 2) ANX-APP (database application included with ANX control panel)

- a) PC with Windows® 95/98/NT operating system.
  - i) 486 minimum, Pentium® or equivalent processor preferred
  - ii) SVGA Video recommended
  - iii) CD-ROM or 3.5" Disk Drive

or SigMatriX Software (optional PC control software with database building application)

- b) PC with Windows® 95/98/NT operating system.
  - i) Pentium® or equivalent processor
  - ii) SVGA Video recommended
  - iii) 32M RAM
  - iv) 10MB Hard Disk Space
  - v) CD-ROM or 3.5" Disk Drive

## ANX Front Panel - Controls and Displays



### 1) Source Level Control Buttons.

Indicates valid, active or locked control levels of the router. This set of eight buttons required for either breakaway or split mode switching. Not used for normal Audio-follow-Video switching.

LED Off indicates a valid source level.

LED On indicates level lock out or restriction. Restrictions are dictated by the database tables.

LED Flashing indicates the source levels are cued to be preset separately from other valid levels.

### 2) Display

Provides various alphanumeric information pertaining to the setup or operation of the ANX control panel. Normal static display shows the Status information in the top window and Preset information in the bottom window. The display provides Source name and Level data on the left side and Destination name on the right side. Review modes show source names assigned to all eight levels. Menu items and group table name information is displayed based on the selected mode of operation.

Steady On display indicates a status or available selection name.

Flashing information indicates a preset condition.

Dashed lines indicate a restricted or unassigned condition.

### 3) PRESET Button

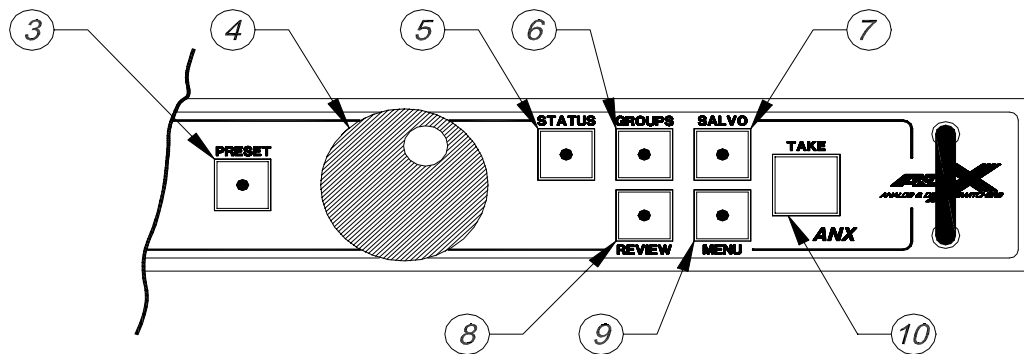
Initiates a routing switch. Pressing the PRESET button places the panel into the preset mode.

LED Off indicates an inactive state where the control panel is in a status or review mode.

LED On indicates an active state where the user can build a switch command.

LED Flashing indicates a valid preset is ready to be executed.

## ANX Front Panel - Controls and Displays



### 4) Scroll Knob

The scroll knob controls an encoder used to select various items presented in the display. Rotation of the knob scrolls through available source or destination devices. It is also used to move the cursor and click select within the Group tables and Menu displays. To select the current item push (click) the knob.

### 5) STATUS Button

Provides a single level review of the destinations in combination with the scroll knob. Scrolling through the destinations provides status of the lowest valid level for the destination device per the database tables. Initiates a complete (all levels) review of the destinations in combination with the REVIEW button. Initiates a select review of destinations within a group in combination with the GROUP buttons.

### 6) GROUPS Button

Used to select either Destination or Source groups to limit a scrolling search within a specific group of devices. Groups are assigned by the database loaded into the router's control module.

### 7) SALVO Button

Enables the Salvo mode for execution of preprogrammed salvos stored in the router. The ANX control panel can execute the 10 Salvos stored within the router.

### 8) REVIEW Button

Used in the preset mode to review the preset condition for all control levels of a pending switch. Also used to review status of destinations in conjunction with the Status button.

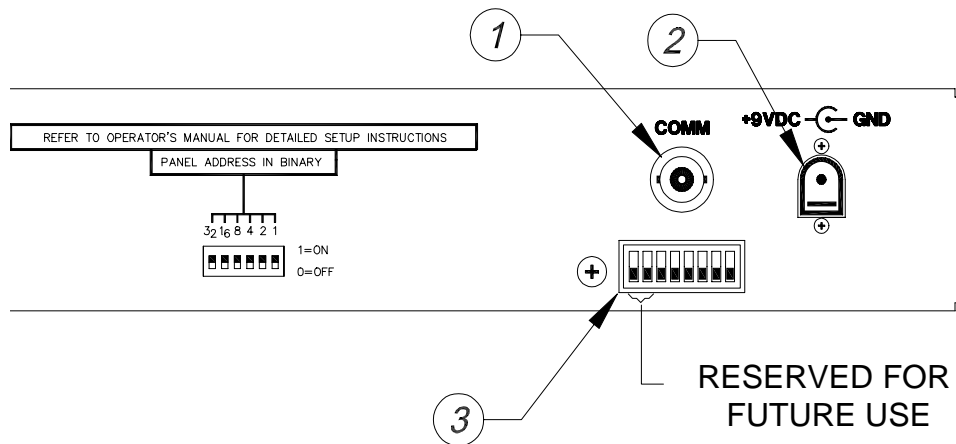
### 9) MENU Button

Toggles on and off the display of the menu select items.

### 10) TAKE Button

Executes a preset switch. Functional when Auto-Take is OFF within the menu (default condition).

## ANX Rear Panel - Controls and Connections



### 1) COMM Port

Communication port on the ANX control panel connects to the Comm port of the router SCI module. Standard coaxial cable with BNC connectors are used for the Comm port. Multiple panels may be connected to the system with the use of BNC "T" connectors. Do not terminate the Comm line cable.

### 2) DC Power

DC power jack. Package includes a +9VDC, 900 mA wall transformer.

### 3) DIP Switch

The 8 position DIP switch is used to select the panel address. Multiple panels within a system require unique addresses. Refer to the Appendix section of the manual for details.

# ANX CONTROL PANEL OPERATION

## Chapter 1: Menu Setup

### Section 1.01 General Information

The ANX Menu Mode allows the operator to choose certain panel and system operating conditions. The Menu Mode can only be enabled when there are no other active panel operations such as Status, Preset, or Salvo. To enable the Menu Mode, press the Menu button. The LED in the MENU button illuminates to indicate the menu mode is active.

The Menu opens to the first page with a flashing cursor placed to the left of the “Auto-Take” enable function. Rotate the knob to move the cursor to the desired menu function. Rotating the knob cycles through all first page entries and then through all second page entries. Place the cursor in front of the desired function and press (click) the knob to enable setup of that function. Upon the press of the knob the cursor moves down to the bottom line of the display. The cursor points to the changeable parameter. Rotating the knob cycles through the user selectable options for that function.

### Section 1.02 Local Panel Controls

The menu provides control of three local functions; Auto-Take, Brightness and Mode.

ITEM	MENU NAME	OPTIONS	FUNCTION
1	Auto-Take	OFF	Auto-Take is disabled
		ON	Auto-Take is enabled
2	Brightness	1	Display Brightness Lowest
		2	
		3	
		4	Display Brightness Highest
3	Mode	ALPHA	Enables Alpha mode of operation
		NUM	Numeric mode only
		ALPHA*	No Alpha Data Available from router

The Auto-Take function toggles between On (enabled) and Off (disabled). Most operators will desire the Auto-Take to be disabled which is the factory default of this function. With Auto-Take disabled the execution of a switch requires the use of the TAKE button. This is referred to as a preset switch. Note that with Auto-Take enabled the selection of the source device executes the switch. **There are no second chances in the Auto-Take enabled mode. If the operator mistakenly presses (clicks) the knob on the wrong source the switch to that source will be executed.**

Brightness control allows the operator to choose a sufficient viewing intensity of the display. As the operator selects the intensity setting the display automatically changes to give immediate feedback. There are four intensity settings to adjust the display brightness for dim to brightly lit room environments.

The MODE function selects either numeric or alphanumeric operation of the ANX control panel. The ANX will default to the alphanumeric mode if the router is properly prepared. Alphanumeric mode requires a downloaded database to be present in the router. This is achieved from either the ANX-APP or SigMatriX software package. Refer to the specific manual on either of the software options for more details on development and downloading of databases. If the Alphanumeric mode is selected and there is no database information in the router’s SCI, an asterisk “\*” will flash in the menu display. The operation of the ANX panel will default to the Numeric mode if no database is accessible.

## Section 1.03 System Information

ITEM	MENU NAME	OPTIONS	FUNCTION
4	System Info	None	This is an information only display. Displays: software version and panel address System matrix size: #IN X #OUT

Pressing the knob with the cursor pointing to the System Info menu item will display pertinent system parameters. The ANX firmware version is displayed in the upper right hand corner. The version can be checked to ensure specific features or enhancements are provided by the control panel.

The logical panel address is displayed in the lower left corner. This is the address set by the DIP switch on the rear of the control panel. Unique panel addresses prevent control conflicts when multiple panels are on a system.

The router system configuration is displayed in the lower right corner. The displayed matrix indicates the router's capacity of sources and destinations. For example, **Matrix 48 x 64** indicates the router is configured for 48 source connections and 64 destination devices. Note that the router matrix size does not guarantee access to all source and destination connections by the ANX panel when in the alphanumeric mode. Valid database entries must exist for the ANX to use the source or destination. The ANX numeric mode will scroll through all configured numeric sources and destinations

## Section 1.04 System Operating Controls (Chop mode functions)

ITEM	MENU NAME	OPTIONS	FUNCTION
5	CHOP	OFF ON	Chop function is disabled. Chop function is enabled. A flashing 'CH' appears in the upper right display indicates Chop enabled.
6	Ref	XXX	Selects Chop Reference source signal. 'XXX' is: Any input number up to and including the maximum number of inputs in the system.
7	Test	YYY	Selects source of Test signal in Chop mode. 'YYY' is: Any input number up to and including the maximum number of inputs in the system.
8	Out	ZZZ	Selects destination to monitor Chop mode signal. 'ZZZ' is: Any output number up to and including the maximum number of outputs in the system.
9	Level	x	Selects the source level to use for the Ref (item 6) and Test (item 7) signals. 'x' is: Any level number from 1 - 8. Four level systems are limited to 1 - 4.
10	Rate	1-60	Chop Rate (or hold duration in number of color fields) is the switching frequency between the Ref and Test signals. One field is approximately 0.016 seconds. The Chop Rate can be varied from 1 field (0.016 seconds) to 60 fields (1 second). The default rate is 5 fields (0.08 seconds).



The Chop Mode is provided to compare the timing of two signals, Ref and Test, where Ref is the reference signal and Test is the signal under test. During Chop mode operation the specified destination will sequentially receive the Ref and Test signals at the set Rate. The Rate number represents the number of fields the signal will hold on before it switches to the other signal.

The display will indicate if the signals are not properly timed. This may appear as a horizontal line rolling through the display or a rolling image at the time of the switch. A clean switch will occur between properly timed signals.

Changes made to system related menu functions are sent to the SCI. These changes will be reflected on other comparable panels in the system. Other control panels as well as a reset of the SCI can change system related menu functions.

### Section 1.05 Exit Menu Mode

Multiple menu items may be addressed before exiting. Simply use the knob to scroll and click to choose each item. Pressing the knob after the cursor is on the bottom line returns the cursor to the top line of the menu display and the panel will remain in the Menu mode for further changes.

The Menu mode can be exited by pressing the Menu button. Option changes local to the panel are updated immediately and stored in the ANX non-volatile memory. Changes to local panel options do not effect the operation of any other control panels in the system.

## Chapter 2: Alphanumeric Mode

### Section 2.01: Status Display

Alphanumeric status is presented in the top line of the display. The left side of the display shows the source selection while the right side of the display shows the destination. The level display associated with the source name is the lowest valid level available for the selected source.

To display the status for another destination press the STATUS button. The status LED will be illuminated indicating an active status mode. Rotate the knob to scroll through the destination entries. Direction of rotation will scroll up or down through the entries in the group tables. From this mode all entries from all groups can be viewed.

### Section 2.02: Status Display within Groups

To view the status of entries in any single group, select the GROUP button. The GROUP button LED will flash indicating that a group selection may be made. A flashing cursor will be displayed along with the defined destination groups in the system. Rotating the knob will scroll the cursor through the available groups. Position the cursor at the desired group and press (click) the knob to select a group. The selected group will be locked in and scrolling will be limited to entries in that group. Knob rotation scrolls through the status of destinations in the selected group.

To change to a different group, press the GROUP button. To exit the group mode, press the GROUP button twice. The group mode can be activated at any time during the status display mode.

### Section 2.03: Status Review

To view all the level assignments of a destination, use the review mode. Pressing the REVIEW button will display all eight source levels of the selected destination. Invalid or unassigned sources are displayed as dashed lines. To exit the status review mode, press the REVIEW button to step back into the status mode. To jump out of the review and status mode simply press the STATUS button, the STATUS button LED will turn off.

### Section 2.04: Preset Follow Mode Switch

To enter a preset condition in the ANX panel, press the PRESET button. The currently selected destination will drop down from the status display to the preset display. If this is not the desired destination, rotate the knob to select the desired destination. When the desired destination is displayed, press (click) the knob. The destination is now preset into the ANX panel. To cancel an incorrectly selected destination press the PRESET button. This will exit the preset mode. Press the PRESET button again to enter back into the preset mode.

A preset destination is indicated by the flashing destination display. The first valid level for the selected destination will appear in the source display of the bottom window. If the source status displayed in the top window is a valid input for the selected destination it will drop down into the preset window. If the source status display information in the top window is not valid, the panel will find the first valid source within the group tables. To change the source, rotate the knob and press (click) to select. The lowest valid level for the destination is displayed in the source window. A preset is ready to be executed when the source and destination preset names are flashing.

## Section 2.05: Preset Follow Mode Switch Review

To view the complete contents of the preset switch press the REVIEW button. The active levels for the preset switch will be flashing in the review window. Any non-flashing levels will either have the current status information or dashed lines to indicate an invalid or undefined condition. In the review mode, the knob is disabled. Along with the ability to view the status an execution of the preset condition may occur with a press of the TAKE button.

To change the preset condition, exit the review mode. Press the REVIEW button to go back into the normal preset display. Rotate the knob to cancel the selected source. Select a new source. To view the change, return to the normal preset display or select the review mode to see all preset levels. The TAKE button will execute the preset condition from either display.

## Section 2.06: Preset Follow Mode Switch Execute

In the follow mode all source levels which are valid for the currently selected destination will be set to preset active. A flashing LED in the PRESET button indicates a valid active preset condition. Pressing the TAKE button with an active preset condition will cause the ANX to send the command to the SCI and the TAKE will be initiated. If the TAKE is valid the preset window will be cleared and the preset LED will be turned off. The current status of the switch will be displayed in the status window.

## Section 2.07: Use of Groups

It may be more beneficial to use the group mode to select the destination and the source names within systems containing a great number of devices. The use of groups limits the search to user defined categories. To accomplish this task, use the following steps. For a preset follow condition, press the PRESET button. The destination status will drop down to the preset window. Press the GROUP button. The flashing LED in the GROUP button indicates the group select mode. The display shows the preprogrammed destination groups. Rotate the knob to scroll the cursor through the groups names. Select a group by pressing (click) the knob. If an empty group table is selected, the error message; "Selected Group Has No Level Assignments" will appear. The panel will automatically return to the group selection mode. When a group with valid entries is selected, the LED in the GROUP button will transition from a flashing to a constant on condition. In this group mode, only the entries in that group are displayed in the preset destination window. Rotate the knob to scroll through valid destinations within the group. Press (click) the knob to lock the desired destination into the preset window.

A valid source will be displayed in the preset window. To select a group for the source preset, press the GROUP button. The display will change to the group select mode. Rotate the knob to scroll through the groups that are defined in the system. Place the flashing cursor at the beginning of the desired group and press (click) the knob to select. Only entries within the selected group will be available. To select a source, press (click) the knob. If the PRESET button has a flashing indicator the control panel is ready to execute a switch. Press the REVIEW button to view the complete 8 level preset condition. Only those levels associated with this currently selected preset will be flashing. A switch may be executed by pressing the TAKE button.

## Section 2.08: Level Restriction and Lock Out

After a destination is preset, the available source levels are indicated by the LED's incorporated in the LEVEL buttons on the left-hand side of the panel. If a selected destination is configured for levels 1-4, the LED's in the buttons for levels 5-8 will be illuminated signifying the levels are restricted. They are in essence locked out. The panel will not allow a source preset within the restricted levels.

A user may implement level lock out. Before a preset condition is activated the LEVEL buttons can be used to lock a level. This level lock feature protects the locked level(s) from changing during a switch. To lock out a level, press the LEVEL button and hold for approximately 0.5 seconds. A level lock out is indicated in the same manner as a restricted level, by a constant LED on within the level button. Both conditions, level lock and restricted level, result in the same loss of accessibility by the user. To cancel a lockout condition, press and hold the level button until the LED is extinguished. If levels are locked out on the panel, those levels will not change even though they are part of the current source entry. Also if a level is locked out it will not be displayed in the preset window even if it is a valid level for the currently selected destination. For example, if the current selected destination has valid levels 1-3 and level 1 is locked out, the preset source display level will immediately show level 2 which is the next available level for that selected destination.

## Section 2.09: Preset Breakaway Mode

In breakaway mode, the destination is selected the same way as in the follow mode. After a valid destination selection, pressing one or more of the level buttons before rotating the knob will allow just those levels to change. For example, selecting levels 3 and 4 will now only allow those levels to change if they are valid for the currently selected destination. The preset source window will display the last level selected using the level buttons. For example, if levels 3 & 4 are selected, when the level 3 button is pushed, that source level will be displayed in the preset source window. When the level 4 button is pushed, the level 3 data will be replaced by the level 4 data. The level 3 and level 4 LED's will flash to indicate a breakaway condition. This shows that they are the active switch levels. Rotate the knob for source selection. Only sources with valid levels 3 and 4 will be displayed during the scrolling search. Press (click) the knob to select the desired source. After the breakaway source is selected, the flashing level LED indicators turn off. All eight levels can be viewed by enabling the review mode. A TAKE can also be initiated.

Rotating the knob before doing a TAKE, cancels the current preset source selection on the breakaway level(s). The flashing LEDs in the level button(s) indicate breakaway levels that remain active for selection of a different source. To cancel out of the breakaway condition press one of the LEVEL buttons with a flashing LED.

## Section 2.10: Split Mode (With Auto-Take OFF)

To perform a split mode switch with the ANX panel, select the destination as in a follow mode. With the destination selected choose the level(s) for the first part of the split switch. For example, pressing LEVEL 2 button only allows selection of a source with a valid level 2 entry. Pressing (click) the knob presets the level 2 source into the ANX Panel. Pressing another level(s) allows additional selection of source(s) on other levels. Any number of levels (individual or multiple) can be selected and preset into the ANX. Use the review mode to view all preset levels. When all desired levels are preset, press the TAKE button to execute the switch.

A split mode switch can also be performed by a combination of a follow mode and a breakaway switch. Select the desired destination, select and preset the source as in the follow mode. Next, select any level or levels as in a break-away mode and preset with a press (click) of the knob. The action taken by first performing a follow mode and next performing a breakaway results in a split mode switch. To view the status of source presets on all levels, press the REVIEW button. When source preset conditions are satisfied press the TAKE button to execute the switch.

## **Chapter 3: Numeric Mode**

### **Section 3.01: Status Display**

The numeric status display shows all level source assignments for the currently displayed output number. To view the status for a different output, rotate the knob clockwise to increment the output number and counterclockwise to decrement. The source status is updated immediately whenever the output number is changed.

### **Section 3.02: Preset Follow Mode Switch**

Press the PRESET button and “Select OUTPUT =xxx” will be displayed. Rotate the knob to change the output number. When the desired output number is displayed, press (click) the knob to complete the selection. The selected output number will now flash and the status of the current inputs will be displayed. Rotate the knob to change the input number. Press (click) the knob to preset the inputs. The preset LED should now be flashing indicating a valid preset condition. Pressing the TAKE button will execute the switch. Note: rotating the knob after a preset condition is established will cancel the current source preset. A new source preset may be selected. To escape out of the preset mode press the PRESET button before a TAKE is executed.

### **Section 3.03: Preset Breakaway**

Select the destination as in the preset follow mode. Select the appropriate levels to change by pressing the corresponding LEVEL button(s). Rotating the knob at this point will change only the levels that are selected (flashing LED in level button). When the desired source is displayed, press (click) the knob to preset the source. The preset source level(s) will flash in the display as well as the LED in the PRESET button. The LEVEL button LED(s) will be extinguished. Pressing the TAKE button will execute the switch. To cancel the source preset, rotate the knob. To escape out of the preset mode press the PRESET button before a take is executed.

### **Section 3.04: Preset Split (with Auto-Take OFF)**

Select the destination as in numeric preset follow mode. Select the desired level(s) by pressing the corresponding LEVEL button(s). At this point rotating the knob will change the selected levels. When the desired source is displayed, press (click) the knob to preset the source. The preset source level(s) will flash in the display as well as the LED in the PRESET button. The LEVEL button LED(s) will be extinguished. Select the next level(s) to be changed. Rotate the knob to select the source of the next level(s) then press the knob to preset the selected levels. Continue selecting and presetting levels until all required levels are preset. Remember that, any time the LED in the PRESET button is flashing, a valid switch is preset and pressing the TAKE button will execute the switch.

## **Chapter 4: Salvo Operation**

### **Section 4.01: Salvo Preparation**

The ANX control panel is capable of executing any salvo stored in the SCI of the router. The router must have preprogrammed information to define the action of the salvo. The database used to create the salvos will allow either a single switch or any combination of switches up to the maximum number of destinations. Refer to the proper application software to build salvos.

### **Section 4.02: Salvo Execution**

Press the SALVO button to select the salvo mode. Rotate the knob until the desired Salvo number appears in the lower right corner of the display. Press the knob to preset the salvo. In the preset mode the salvo number will flash to indicate a valid preset condition. Rotate the knob to change the salvo selection. The rotation of the knob cancels the preset and scrolls through the available salvos. Press the SALVO button to cancel the salvo mode without execution of a salvo. The TAKE button must be pressed to execute the salvo. After execution of the salvo the display will return to a normal status view. In the Auto-Take mode the ANX panel will immediately execute the salvo when the knob is pressed to select the desired salvo. An active salvo mode disables all other buttons.

## **Chapter 5: Groups Button**

### Section 5.01: General Description

The ANX control panel may scroll through available source and destination devices partitioned into descriptive groups. The groups are designated by the database preprogrammed into the router.

The GROUPS button is not functional in the numeric mode. The GROUPS button has multiple functions. Selection of the GROUPS button is not allowed until the user selects either the preset mode or status mode. After pressing the PRESET button, the operator may then use the GROUPS button to limit the scrolling search to devices within the specific group. Upon selection of the destination, the GROUPS button will be disabled. The user can enable a limited source group search by pressing the GROUPS button again. When a device is preset the group mode is disabled.

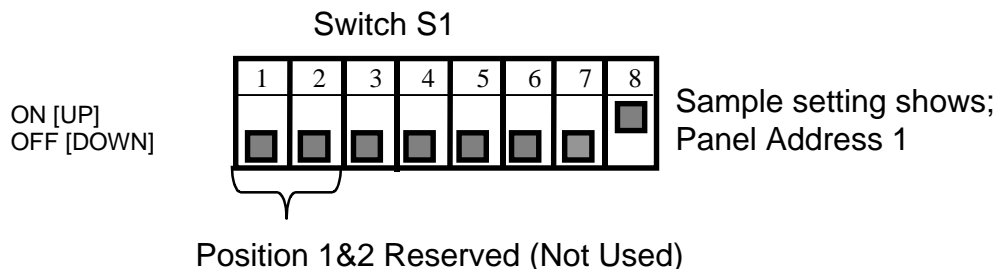
In the status mode the GROUPS button will limit the status search to specific group devices. To enter the status mode press the STATUS button. The single level status of all devices may be checked. The user may press the GROUPS button to limit the scrolling to devices within a preprogrammed group. Use the knob to scroll through the groups and press (click) to select the desired group. Press the GROUPS button again to change to a different group.

To cancel the group mode, simply press the GROUPS button a second time, before selection of a group is made. The flashing LED within the GROUPS button allows a second press of the GROUPS button for cancellation. Complete cancellation may be achieved by pressing the button for the current mode of operation; i.e. press the PRESET button to cancel preset mode or press the STATUS button to cancel status mode.



## Appendix A - Panel Address Switch Settings

Several Control panels may be connected to one router via a looping coaxial cable. The SCI within the master frame sequentially polls each panel in the system for updates. Control panels must have unique addresses to prevent more than one update response to the SCI at any given polling request. The ANX control panel has an eight position DIP switch, S1, on the rear of the unit. Switch positions S1.3 through S1.8 are used to set the panel's address. Refer to the table below for switch settings and corresponding panel address.

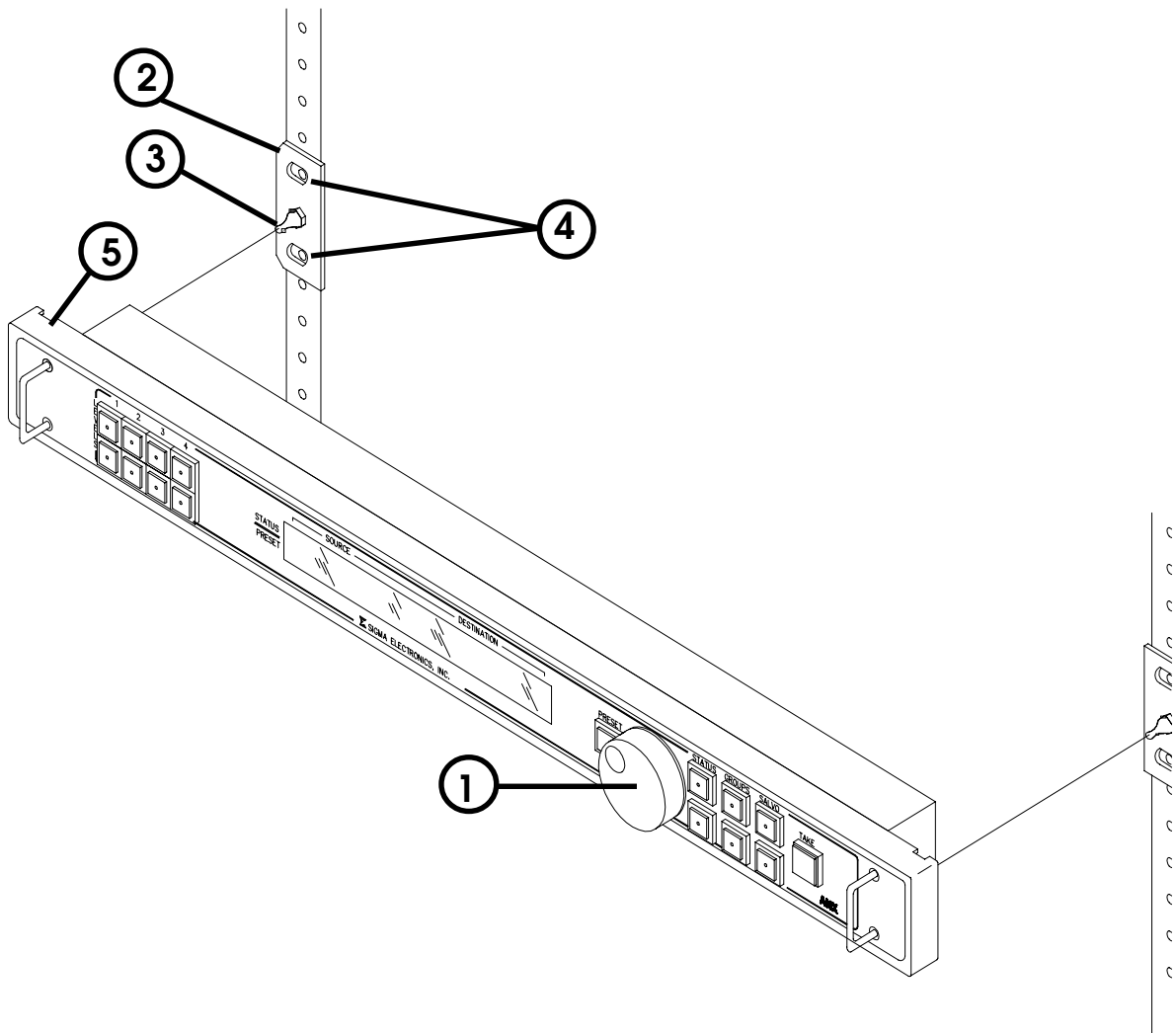


Binary	32	16	8	4	2	1	Binary	32	16	8	4	2	1
Address	S1.3	S1.4	S1.5	S1.6	S1.7	S1.8	Address	S1.3	S1.4	S1.5	S1.6	S1.7	S1.8
1	OFF	OFF	OFF	OFF	OFF	ON	33	ON	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	ON	OFF	34	ON	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	ON	ON	35	ON	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	ON	OFF	OFF	36	ON	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	ON	OFF	ON	37	ON	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	ON	ON	OFF	38	ON	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	ON	ON	ON	39	ON	OFF	OFF	ON	ON	ON
8	OFF	OFF	ON	OFF	OFF	OFF	40	ON	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	ON	OFF	OFF	ON	41	ON	OFF	ON	OFF	OFF	ON
10	OFF	OFF	ON	OFF	ON	OFF	42	ON	OFF	ON	OFF	ON	OFF
11	OFF	OFF	ON	OFF	ON	ON	43	ON	OFF	ON	OFF	ON	ON
12	OFF	OFF	ON	ON	OFF	OFF	44	ON	OFF	ON	ON	OFF	OFF
13	OFF	OFF	ON	ON	OFF	ON	45	ON	OFF	ON	ON	OFF	ON
14	OFF	OFF	ON	ON	ON	OFF	46	ON	OFF	ON	ON	ON	OFF
15	OFF	OFF	ON	ON	ON	ON	47	ON	OFF	ON	ON	ON	ON
16	OFF	ON	OFF	OFF	OFF	OFF	48	ON	ON	OFF	OFF	OFF	OFF
17	OFF	ON	OFF	OFF	OFF	ON	49	ON	ON	OFF	OFF	OFF	ON
18	OFF	ON	OFF	OFF	ON	OFF	50	ON	ON	OFF	OFF	ON	OFF
19	OFF	ON	OFF	OFF	ON	ON	51	ON	ON	OFF	OFF	ON	ON
20	OFF	ON	OFF	ON	OFF	OFF	52	ON	ON	OFF	ON	OFF	OFF
21	OFF	ON	OFF	ON	OFF	ON	53	ON	ON	OFF	ON	OFF	ON
22	OFF	ON	OFF	ON	ON	OFF	54	ON	ON	OFF	ON	ON	OFF
23	OFF	ON	OFF	ON	ON	ON	55	ON	ON	OFF	ON	ON	ON
24	OFF	ON	ON	OFF	OFF	OFF	56	ON	ON	ON	OFF	OFF	OFF
25	OFF	ON	ON	OFF	OFF	ON	57	ON	ON	ON	OFF	OFF	ON
26	OFF	ON	ON	OFF	ON	OFF	58	ON	ON	ON	OFF	ON	OFF
27	OFF	ON	ON	OFF	ON	ON	59	ON	ON	ON	OFF	ON	ON
28	OFF	ON	ON	ON	OFF	OFF	60	ON	ON	ON	ON	OFF	OFF
29	OFF	ON	ON	ON	OFF	ON	61	ON	ON	ON	ON	OFF	ON
30	OFF	ON	ON	ON	ON	OFF	62	ON	ON	ON	ON	ON	OFF
31	OFF	ON	ON	ON	ON	ON	63	ON	ON	ON	ON	ON	ON
32	ON	OFF	OFF	OFF	OFF	OFF	64						RESERVED

## Appendix B - Replacement Parts for ANX Control Panel

The parts listed below are customer accessible components of the ANX Alphanumeric Master Control Panel. Sigma Electronics Inc recommends service to be performed only by qualified technicians.

Item	Qty	Part Number	Description
1	1	2400-K1R5	Scroll Knob
2	2	1400-M-11127	1 RU Mounting Plate, attaches to rack
3	2	1400-CH-0SA	Ball Stud, screws onto mounting plate
4	4	2825-S10E2-050	10-32 1/2" Rack Screws
5	2	1400-CH-0S-022	Tinnerman Spring Catch, ball stud capture hardware
6	1	4000-M9J9-AP	Wall Transformer 120 VAC, 9 Vdc 900 mA
7	OPT	4000-M9G0-MP	Wall Transformer 230 VAC, 9 Vdc 900 mA



## Appendix C - Troubleshooting Guide

<u>Symptom</u>	<u>Possible Cause and Solution</u>
Display shows error message; No Comm Line Communication With SCI ...	Coaxial Cable between Comm ports on ANX and SCI of router is open. Possible poor connection between coax BNC and Control panel BNC. Check for improper center pin seating or open connection on cable.
Display shows error message; THE SCI NEEDS TO BE SET TO THE ALPHA MODE IN ORDER FOR THE ANX TO FUNCTION.	The ANX control panel requires the router SCI module to be set for Alpha mode. Refer to the router operator's manual for proper SCI settings. (Remember to cycle power to the SCI after changing DIP switch settings.)
Display shows error message; "SELECTED GROUP HAS NO MATCHING LEVEL."	A source device search is being done within a specific group of devices. The group of devices does not contain a valid entry with levels that match the destination device level configuration. Select a different group or cancel the group mode to select a valid source.
Display shows error message; "SELECTED GROUP HAS NO LEVEL ASSIGNMENTS."	The group tables within the database has a group name with no device entries. Empty groups will be displayed in the group function, but the ANX will not have any valid data to select. Operators may want to delete empty groups from the database to reduce confusion of device selection.
Display shows error message; "THERE ARE NO AVAILABLE LEVELS."	Operator attempted to select a destination with all available levels locked out by the LEVEL buttons. The preset mode must be cancelled to unlock levels.
Display shows error message; "LEVEL COMBINATION NOT VALID FOR SWITCH."	A breakaway switch attempted on more than one source level must have a valid device within the database tables. If the database tables do not contain a valid device entry matching the combination of levels the breakaway can not be performed.
Control Level buttons 5 to 8 light to indicate a lock out when a destination is preset. No access is provided for levels 5 through 8.	Make sure group tables include valid Source devices on levels 5 through 8. Also check the router SCI to ensure the Source Level Selection switch is in the 8 level position.
Display shows error message; "LEVEL NOT VALID FOR ACTIVE GROUP."	Attempting to select a level that is invalid, will display this error message. In Preset mode, only those levels that are valid for the active group may be selected for a break-away condition. Review the Groups display to determine appropriate level selections.
No change to router crosspoints after execution of SALVO.	The router SCI must have valid Salvo commands preprogrammed. The Salvo execute command from the ANX occurs without regard to what commands, if any, are stored in the Salvo.